

REMARKS

In the Claims

Claim 1 is amended to recite the features originally claimed in claim 9.

The new claims have support in the specification, for example, on page 4, line 29 to page 5, line 15.

The Rejections Under 35 USC § 102 and 103

The Office Action alleges that Jacobs discloses a method having all the limitations of the claims, except the number of peaks. The Office Action alleges that selecting the number of peaks merely is optimizing for the “optimum range” which involves only routine skill in the art. Applicants respectfully disagree. Jacobs only teaches the measurement of one resonance frequency in a sample at any one temperature, and not of multiple frequencies (claim 1), or of 10 or more frequencies (claim 9). Thus, there cannot be anticipation by Jacobs. The withdrawal of the only rejection over claim 1 is thus requested.

With respect to the obviousness rejection over claim 9, no teaching or suggestion in Jacobs would motivate one of ordinary skill in the art to measure multiple frequencies at any one given temperature in a given sample, and especially not to measure 10 or more frequencies at any one temperature. Certainly Jacobs could have used more than one measurement (at least by using two different lasers), but he chose not to. Nothing of record provides the necessary motivation to use two or more peaks in the claimed process. Thus, selecting more than one peak is not merely optimizing for the “optimum range.” No range is taught by Jacobs that could be optimized.

The CCPA in *McGinley v. Franklin Sports Inc.*, 60 USPQ2d 1001 (CA FC 2001), addressed a similar situation when stating that “in cases ... where a single prior art reference is alleged to render the claimed invention obvious, there must be a sufficient showing of a suggestion or motivation for any modification of the teachings of that reference necessary to reach the claimed invention in order to support the obviousness conclusion.” No suggestion or motivation for any modification in the number of measured resonance frequencies in a given sample at any one given temperature is provided by the reference. Thus, the rejection is improper.

Additionally, even if multiple references were used for the rejection over claim 9, to

support a rejection under section 103, "either the references must expressly or implicitly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *In re Oetiker*, 24 USPQ2d 1443 (CA FC 1992).

The remaining rejections are for dependent claims. Thus, applicants choose not to burden the record with arguments addressing each of these rejections separately. Once the rejection over claim 1 is withdrawn and claim 1 is found allowable, claims dependent from claim 1 will be allowable as well.

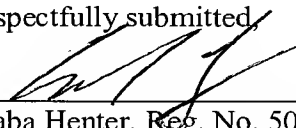
Reconsideration is respectfully requested.

New Claims

The new claims recite an additional step. Namely, in order to make high precision measurements, the method involves measuring the absolute position of resonance frequencies by simultaneous use of a reference standard having multiple fiducial marks and overlaying these onto etalon based resonances. None of the cited references teach or suggest using a reference standard to overlay multiple fiducial marks onto etalon based resonances. Thus, the new claims are patentable.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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